

CLAIM AMENDMENTS

Claim Amendment Summary

Claims pending

- Before this Amendment: Claims 37-41 and 72-82.
- After this Amendment: Claims 37-41 and 72-82.

Non-Elected, Canceled, or Withdrawn claims: 1-36 and 42-71

Amended claims: 37, 72 and 78.

New claims: none

Claims:

1-36. (Canceled)

37. (Currently Amended) A method comprising:

receiving a query;

mapping the query from a query space to a question space to identify associated frequently asked questions (FAQ), the mapping comprises:

analyzing a log database to determine a relevance of previously stored frequently asked questions to the query, the analyzing comprises:

iteratively training a search engine using data in the log database,

wherein the search engine comprises a query parser and a FAQ matcher;

deriving weighting factors based on the iterative training, wherein the weighting factors are used to determine the relevance;

identifying a confidence rating which measures a degree of the relevance between the previously stored frequently asked questions and the query; and

ascertaining from the previously stored frequently asked questions the associated frequently asked questions based on the determined relevance;

mapping the associated frequently asked questions from the question space to a template space to identify associated templates;

mapping the templates from the template space to an answer space to identify associated answers; and

returning the answers in response to the query.

38. (Previously Presented) A method as recited in claim 37, wherein the mapping from the query space to the question space comprises:

parsing the query to identify at least one associated concept; and
correlating the concept to one or more frequently asked questions.

39. (Previously Presented) A method as recited in claim 37, wherein the mapping from the question space to the template space comprises cross-indexing from a first table containing question identifications to a second table containing

template identifications.

40. (Previously Presented) A method as recited in claim 39, wherein the mapping from the template space to the answer space comprises cross-indexing from the second table to a third table containing answer identifications.

41. (Previously Presented) A method as recited in claim 37, further comprising:

presenting the answers to a user for confirmation as to which of the answers represent the user's intentions in the query;

analyzing the query and the answers confirmed by the user; and

modifying the answers that are returned in response to the query based on information gleaned from the analyzing.

42-71. (Canceled)

72. (Currently Amended) A method of parsing a search query, comprising:

segmenting the search query into individual character strings, wherein at least one of the individual character strings comprises a single character;

producing a parse tree from at least one parsable character string of the search query; and

generating at least one keyword based at least on one non-parsable character string of the search query ; [[,]]

determining a relevance of the parse tree and the at least one keyword to a list of frequently asked questions (FAQ), wherein the relevance is determined

by a FAQ matcher that has been iteratively trained using data from a log database; and

wherein using the parse tree and the keyword ~~are used~~ to return answers to the search query.

73. (Previously Presented) The method of claim 72, further comprising:

conducting keyword searching using the at least one keyword.

74. (Previously Presented) The method of claim 72, wherein the parse tree represents a collection of concepts related to the search query.

75. (Previously Presented) The method of claim 74, further comprising matching the parsed concepts to a list of frequently asked questions.

76. (Previously Presented) The method of claim 75, further comprising:

identifying at least one answer associated with the list of frequently asked questions that match the parsed concepts and keywords; and

presenting the at least one answer to a user in a user interface that permits a user to select a desired answer from the one or more answers.

77. (Previously Presented) The method of claim 76, further comprising:

logging the search query and at least one answer selected by the user in a log database; and

analyzing the log database to derive at least one weighting factor indicating how relevant the frequently asked questions are to the parsed concepts and keywords.

78. (Currently Amended) A parser for a search engine, comprising:

a segmentation module that segments a search query into one or more individual character strings, wherein at least one of the one or more individual character strings comprises a single character;

a natural language parser module that produces a parse tree from one or more parsable character strings of the search query; and

a keyword parser to identify one or more keywords in the search query and to output the keyword,

a log analyzer able to derive, over time, various weights indicating how relevant the parse tree and the one or more keyword are to a list of frequently asked questions, wherein the various weights are determined based on iterative training using data from a log database,

wherein the parse tree and the one or more keywords are used to return answers to the search query.

79. (Previously Presented) The parser of claim 78, wherein the parse tree represents a collection of concepts related to the search query.

80. (Previously Presented) The parser of claim 78, further comprising a search module that matches the parsed concepts to a list of frequently asked questions.

81. (Previously Presented) The parser of claim 80, wherein the search module:

identifies at least one answer associated with the list of frequently asked questions that match the parsed concepts and keywords; and

presents the at least one answer to a user in a user interface that permits a user to select a desired answer from the one or more answers.

82. (Previously Presented) The parser of claim 81, wherein the search module:

logs the search query and at least one answer selected by the user in a log database; and

analyzes the log database to derive at least one weighting factor indicating how relevant the frequently asked questions are to the parsed concepts and keywords.